

WHAT IS CLAIMED IS:

1. A dispenser for sucking and discharging a liquid from a nozzle by moving a piston sliding in the inside of a syringe by a motor mounted in a frame,

5 wherein a detection sensor for detecting the internal pressure of the inside of the syringe is integrally formed by connecting its air inlet directly to a through hole formed to extend to the inner face of the syringe.

2. A dispenser according to Claim 1,
10 comprising control means for controlling the suction and discharge of the liquid from the nozzle.

3. A dispenser according to Claim 1,
wherein the syringe formed integrally with the detection sensor is made removable from the frame.

4. A dispenser according to Claim 1,
15 wherein said motor is so mounted in the frame that its motor portion is kept out of contact with the frame.

5. A dispenser according to Claim 1 or 2,
wherein said control means has functions to stop the suction action, when the detection sensor detects an abrupt rise of vacuum while the liquid is being sucked by
20 the nozzle, and to judge a clogging, when the vacuum detected by the detection sensor rises after lapse of a predetermined time period from the stop of the suction action, and an out-of-liquid when the vacuum lowers.

6. A dispensing device comprising:
control means for controlling the suction and discharge of a liquid from a
25 nozzle by moving a piston sliding in the inside of a syringe by a motor mounted in a frame;

a dispenser including a detection sensor integrally formed by connecting its air inlet directly to a through hole formed to extend to the inner face of the syringe, for detecting the internal pressure in the syringe inside;

30 a dispenser driver carrying a plurality of the dispensers for driving the same vertically or horizontally; and

a plate arraying tube engaging holes in alignment longitudinally and transversely for engaging with tubes to be measured,

wherein the pitch between the nozzle leading end of the nozzle unit of the

dispenser and the nozzle leading end of the nozzle unit of the dispenser arranged adjacent to the former is equalized to the pitch between the tube engaging holes of the plate arranged in the transverse direction.

7. A dispensing device according to Claim 6,

5 wherein said dispenser is given a structure, in which the syringe formed integrally with the detection sensor is made removable from the frame.

8. A dispensing device according to Claim 6,

wherein said dispenser has the motor so mounted in the frame that its motor portion is kept out of contact with the frame.

10 9. A dispensing device according to Claim 6,

wherein said control means has functions to stop the suction action, when the detection sensor detects an abrupt rise of vacuum while the liquid is being sucked by the nozzle, and to judge a clogging, when the vacuum detected by the detection sensor rises after lapse of a predetermined time period from the stop of the suction
15 action, and an out-of-liquid when the vacuum lowers.